## EAST AFRICAN ORNITHOLOGICAL STUDIES IN 1978

The following studies on birds, being undertaken in 1978, were made known to the Ornithological Sub-committee. The studies are listed in no particular order. The information was compiled by D.A. Turner.

- Barbets and woodpeckers. Dr L.L. Short and J.F.M. Horne, American Museum of Natural History, New York. Studies of these two families, with emphasis on behaviour, vocalizations and geographic variation. Noteworth findings during 1978 resulted in an extension of the investigations to include honeyguides, who were stimulated to call and sing following playback of barbet vocalizations; as a result, much new information was obtained. The studies continue.
- Co-operative breeding in White-fronted Bee-eaters. Dr S.T. Emlen, N.J. Demong and R.E. Hegner, Cornell University. This study, begun in 1977, continues to monitor relevant behaviour, ecology, and demography. Many important interactions among individual birds within the co-operative society are being studied in detail. Ringing, and the fitting of wing-flags, continues, permitting observations of recognizable individuals within Lake Nakuru NP.
- Feeding ecology of Wood Hoopoes. Dr J.D. Ligon and S.H. Ligon, University of New Mexico. Preliminary results suggest that food availability in the form of lepidopteran larvae varies greatly from territory to territory, and may account in part for the interflock differences in reproductive success. In addition, studies on the roles of nest helpers of known background and territoriality were continued.
- Comparative studies on the ecology and behaviour of kingfishers. Dr H.-U. Reyer, Max-Planck-Institut, Seewiesen, BRD. Dr Reyer continued the field studies from May to July 1978, this time focussing on the time/energy budgets and breeding success of Pied Kingfishers at Lake Victoria. The aim was to reach a better understanding of the adaptive significance of co-operative breeding in this species. In addition to ringing and observations, radio-tracking was successfully tested. At Seewiesen, with the help of D. Schmidl, the hand-reared kingfishers were studied with regard to communication within pairs and groups.
- A comparison of the bird densities of tropical woods and forests. Prof H.Oelke, Göttingen University, BRD. Compared with coniferous stands in the temperate zone (North America, Europe, Asia), the studied Kakamega pine and Cupressus plantations have hardwood-like bird densities in those plots with an abundant indigenous vegetation, i.e. high bird densities. The Kakamega stands with poorly developed understorey and herbaceous layers are even poorer in their bird fauna than similar physiognomic stands in Scandinavia or Canada. This is mainly due to the lack in the highly specialized tropical bird species to adapt their choice of habitat selection to rather uniform forest stands.
- Behaviour of the Grey-capped Social Weaver. Prof N.E. and Mrs E.C. Collias, Department of Biology, University of California, Los Angeles. Following extensive observations on colour marked individuals in Kenya during breeding and non-breeding periods, the following information was obtained: all birds and family groups slept in their nests the year round; nests were generally not defended against members of other family groups in the same colony, but birds from other colonies were usually attacked when they landed in the colony-tree. Birds forage on the ground in non-defended, communal feeding areas and are organized into dominance hierarchies. Aggression was rare or absent between members of a family, and less frequent between members

- of the colony than between birds from different colonies. Immature birds from previous broods may help adults build nests and feed nestlings, while both members of a pair incubate the eggs. Comparisons were also made between the study-species and the related *Plocepasser mahali*, with regard to behaviour patterns.
- Biology of honeyguides. Dr A.W. Diamond, Department of Zoology, University of Nairobi. Particular emphasis on feeding preferences, metabolism of wax digestion and development of guiding behaviour. The study continues.
- Ecology and distribution of forest birds in Kenya. Dr A.W. Diamond, as above. The studies continue.
- Territorial behaviour of Fiscal Shrikes on Chiromo campus. M. Munano, University of Nairobi, supervised by Dr A.W. Diamond.
- Distribution of forest birds in Kenya. M. Muchoki, University of Nairobi, supervised by Dr A.W. Diamond.
- Bird pests of crops in semi-arid areas of Kenya. N.N. Gichuki, University of Nairobi, jointly supervised by Dr A.W. Diamond and Prof D.E. Pomeroy. Joint project of the University and the Ministry of Agriculture.
- Breeding biology and behaviour of Fish Eagles in Rwenzori NP. S.J.A. Sumba, University of Nairobi, supervised by Dr A.W. Diamond (continuing).
- Breeding biology and behaviour of the Ostrich in Nairobi NP. L. Hurxthal, University of Nairobi, supervised by Dr A.W. Diamond (continuing).
- Environmental factors affecting the distribution of Malachite and Pied King-fishers in Lake Nakuru National Park. Elizabeth W.K. Migongo, University of Nairobi, supervised by Dr A.W. Diamond and Dr H.-U. Reyer (completed 1978).
- Birds of semi-arid areas. Prof D.E. Pomeroy, Kenyatta University College.

  Composition of the bird faunas of selected sites with respect to vegetation and changing land-use. (continuing)
- Ecology of the Black-headed Weaver near Kampala. P. Kasoma, Department of Zoology, Makerere University, Kampala, supervised by Prof D.E. Pomeroy.
- The avifauna of the Arabuko-Sokoke Forest. P.L. & H.A. Britton, Mombasa. Emphasis on four endangered species, but all species of the forest are studied, using ringing and observation. Seasonality, including moult and breeding, is particularly important.
- The status and distribution of coastal shorebirds. P.L. & H.A. Britton and Dr D.J. Pearson. In addition to regular counts of waders and larids, oncemonthly wader ringing sessions take place to collect moult and weight data.
- January range and abundance of Palaearctic waterfowl. B.S. Meadows, Nairobi. In co-operation with the International Waterfowl Research Bureau, the aim is to compile a series of winter distribution maps for East Africa which will attempt to define, in addition to providing information on numbers, the winter range and areas in which Palaearctic waterfowl are recorded. Preliminary results for the 1977/78 and 1978/79 seasons have been published.
- Cambridge ecological expedition to Tanzania 1978. S.N. Stuart (leader), Cambridge; other ornithologists: Miss T.A. van der Willigen (Oxford) and H.R.C. Holland (Cambridge). A comparative study of the forest avifaunas of the East Usambaras, West Usambaras, Ngurus, Ukagurus and the Pugu Hills, with particular emphasis on rare endemic species. Report published.

- Wetlands working group. C.E. Norris (Chairman), Nairobi. Census to list all wetlands favourable to Palaearctic migrants and Ethiopian birds. The study continues. A report for 1977/78 has been prepared.
- The behaviour and ecology of nesting Ostriches in Tsavo NP. Dr B. Bertram, Cambridge. The study continues but no details are available.
- The status, seasonality and distribution of Palaearctic migrants in southern and eastern Kenya. Dr D.J. Pearson, Nairobi. The study continues.
- The Ngulia ringing scheme. G.C. Backhurst and Dr D.J. Pearson, Nairobi and P.L. & H.A. Britton, Mombasa. The study continues and results continue to be published.
- E.A.N.H.S. Nest Record Scheme. Hazel A. Britton, Organizer, Mombasa.

  Collects and collates data supplied by observers throughout East Africa which have been entered on the Scheme's Nest Record Cards. In addition, museum and literature sources are incorporated into the Scheme's data bank. Breeding information extracted on request. (Report pp 126-132.)
- E.A.N.H.S. Bird Ringing Scheme. G.C. Backhurst, Organizer, Nairobi. Administers ringing in Kenya, Tanzania, Uganda and the southern Sudan. Will supply rings (from 2.0 mm to 16.0 mm) to bona fide ringers. The scheme provides ringing schedules and retrap forms as well as servicing recoveries. Reports published in the Journal of the East Africa Natural History Society & National Museum.

In addition to the studies and schemes outlined above, the National Museums of Kenya, Division of Natural Sciences, Section of Ornithology (Head, G.R. Cunningham-van Someren) continues to assist both visiting and local ornithologists in numerous ways, including the production and distribution of a monthly Newsletter.

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